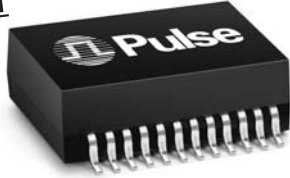


# 1000BASE-T MAGNETICS MODULES

## Designed to Support Gigabit Transceivers



- RoHS-6 peak reflow temperature rating 245°C
- Magnetics, designed for Gigabit PHY used in backplane
- Compliant with IEEE 802.3ab standard

### Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

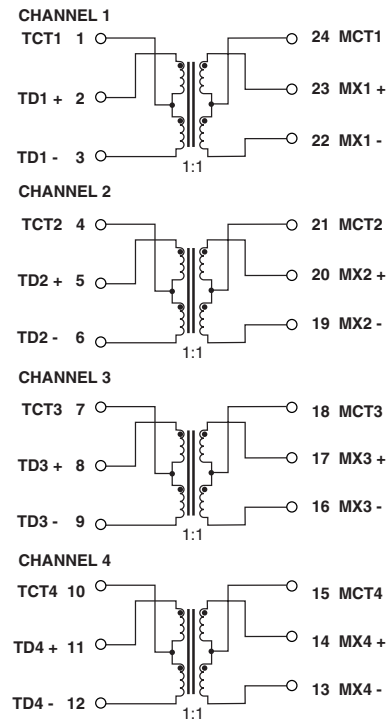
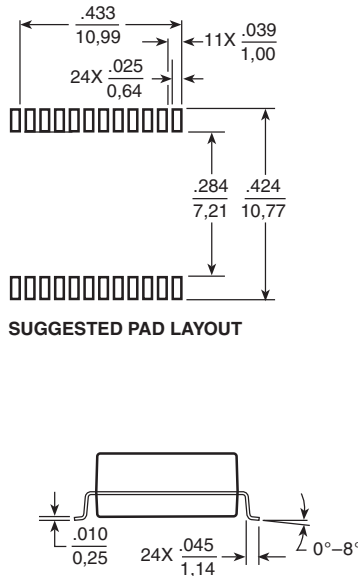
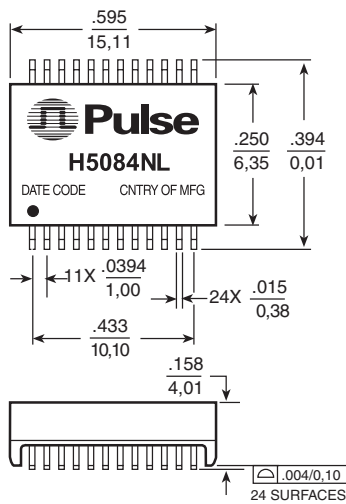
RoHS-6 <sup>1</sup> Compliant Part Number	Insertion Loss (dB MAX)	Return Loss (dB MIN @ 100 W)					Differential to Common Mode Rejection (dB MIN)			Crosstalk (dB MIN)			Hipot (Vrms MIN)
		1-100MHz	1-30MHz	40MHz	50MHz	60-80MHz	100MHz	30MHz	60MHz	100MHz	30MHz	60MHz	
H5084NL <sup>2</sup>	1.0	-18	-18	-16	-12	-10	-43	-37	-33	-45	-40	-35	1500

- RoHS-6:** Product does not contain 5 out of the 6 banned substances specified in the RoHS directive. Some internal connections may contain lead in high-temperature solder (solder alloys containing more than 85% lead).
- MSL =** Moisture Sensitivity Level = 1

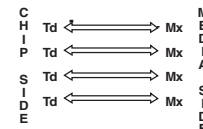
### Mechanical

### Schematic

#### H5084NL



#### LEGEND



Weight ..... 0.6 gram  
Tube ..... 33

Dimensions:  $\frac{\text{Inches}}{\text{mm}}$  Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$

# 1000BASE-T MAGNETICS MODULES

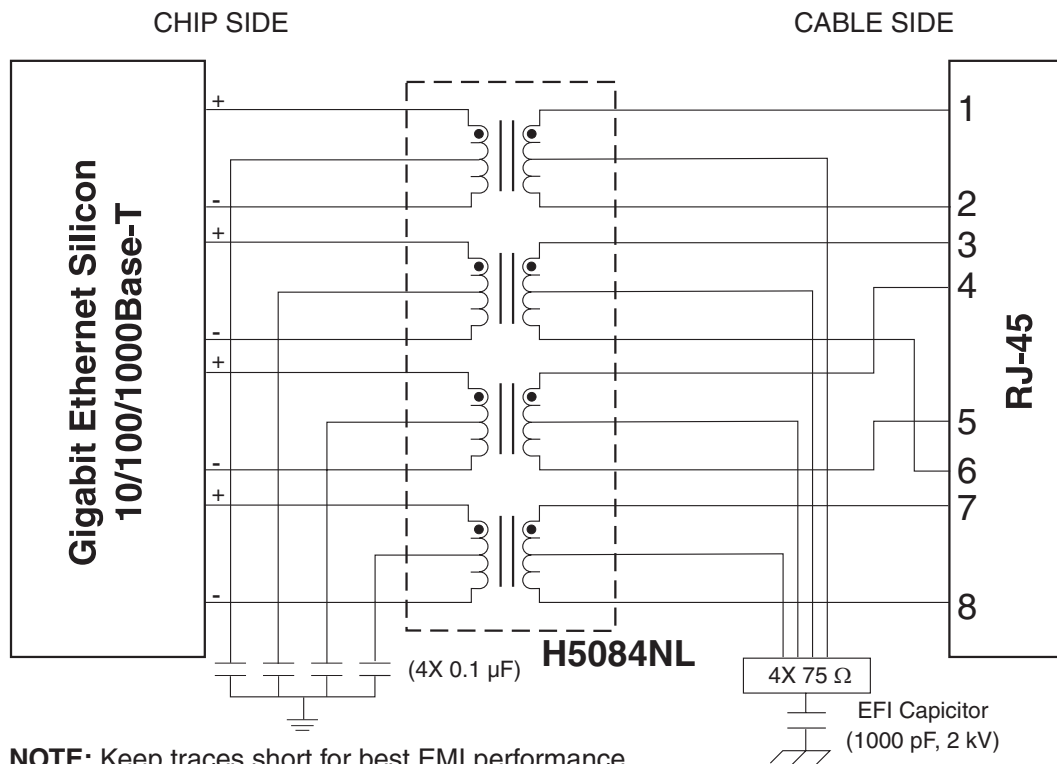
Designed to Support Gigabit Transceivers



## Application Circuit

**H5084NL**

### Gigabit Circuit



**NOTE:** Keep traces short for best EMI performance.

The above circuit is a simple interface for a gigabit transformer connection to both the Gigabit Ethernet silicon and the RJ-45 connector. It is highly recommended that the cable side center taps of each transformer be terminated to 75 Ω resistors and that the four center taps be terminated to an EFI capacitor prior to ground termination.

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